On a New Species of Atalapha.

By Harrison Allen, M.D.

(Read before the American Philosophical Society, January 16, 1891.)

ATALAPHA TELIOTIS, Sp. nov.

Ears rounded much smaller than head. The internal basal lobe longer than broad, and without posterior projection. The external basal lobe longer than high, without notch at the base anteriorly. The hem occupying notch is half the height of the auricle and is ample. The tragus is coarsely crenulate on the outer border, slightly narrowed at the tip, which is not turned forward. The external surface is without a trace of ridge, and the notch at the base above the small basal lobe without a tubercle. Snout and lower lip quite as in other species of the genus, except that the chin-plate is somewhat wider.

Skull with groove on centre of face-vertex continuous with the anterior nasal aperture. Sagittal temporal ridge sinuate. The first upper premolar exceedingly minute, searcely half the size of the corresponding tooth in other species; it can with difficulty be seen even with the aid of a lens. The lower premolars are nearer of a size than is the case in other species, the first being fully half the size of the second. The third lower incisor is rounded, minute, and without cuspules,

The membranes are much as in A. noveboracensis, but the terminal phalanx of the fifth finger is longer, and ends with a free end on the margin of the endopatagium. The membranes are attached to the foot at a point midway between ankle and the base of the toes.

The prevalent color of the hair is dark chestnut above, but lighter below. The base on the body is everywhere black, and the shafts buff. No ashy tips are anywhere seen. The ventral half of the side of neck is white. The hair is scanty along the ventral surface of the forearm and the proximal ends of the last three metacarpals. The dorsum of the interfemoral membrane is furred only at the basal third. The remaining characters as in A. noveboracensis.

This species is readily distinguished by the shape and small size of the ear and tragus, by the attachment of the wing-membrane to the foot, and by the peculiarities of the premolars in both jaws, as well as those of the third lower incisors. It agrees with a southern variety of A. noveboracensis (A. frankii) in the partially free dorsal surface of the interfemoral membrane.

The specimen was forwarded to me by Mr. J. G. Cooper, of the California Academy of Natural Science, in a bottle containing an example of A. noveboracensis, and it resembles this form so closely in coloration that at first I mistook it for an immature example of the species last named.

The specimen is in poor condition. After decomposition had set in, it had been preserved for a long time in strong alcohol.

Habitat unknown. but it is probably Southern California.

Measurements.

Head and body (from crown of head to base of tail) 38			mm.
Length of arm			4.6
" forearm		23	66
(T an ath a C Cost material 1 have		2	4.6
1st digit Lengt	first phalanx	4	"
Ol dimis (Lengt	h of second metacarpal bone	40	6.6
2d digit	first phalanx	6	6.6
Lengt	h of third metacarpal bone	40	6.6
- "	-	14	4.6
3d digit		15	44
66	third phalanx	2	1
(Tanada of County or to some 1 have			4.6
4th digit		10	6.6
("	second phalanx	8	4.6
Lengt	h of fifth metacarpal bone	_	4.6
	first phalanx	7	44
(4	·	7	
Length of head			6.6
Height of ear from head			6.6
' 'base of external lobe to tip		6	
" tragus		3	4 4
Length of thigh		14	6.6
" leg		16	6.6
		6	6.6
" tail		39	4.6
Width 2d interdigital interspace			6.6
" 3d " "			4.6
" 4th "			6.6
Difference between 3d and 4th interspace			6.6
Length of forearm			6.6
Length of forearm 37 "			

Thus the manal formula is 2-10-28-37, the difference between the third and fourth interdigital Interspace 18, and is much the same as in A. noveboracensis.

The measurements of the body and of the metacarpals are within the range of these which can be made on specimens of A. noveboracensis. The second phalanx of the third finger is longer than the second; the second phalanx of the fourth finger is much shorter than the first; the second phalanx of the fifth finger is of the same length as the first. In these respects the measurements are in contrast with those of A. novebora-

censis. The thigh is shorter than the leg, while both are smaller than is the species named. The foot is shorter, while the tail is slightly longer.

Atalapha is the most aberrant of any of the genera of the Vespertilionidæ, as this family is at present defined. It presents features in common with the Emballonuridæ, the Molossi and the Phyllostomidæ. These remarks are appropriate at this place, since in A. teliotis the general plan of the ear is as in Emballonuridæ; the shape of the wing, especially as to the strength of the first metacarpal bone, the shortness of the fifth metacar-· pal bone as compared to others of its series, the rigidity of the phalanges of the fifth digit, the arrangement of the lines in the fourth interdigital space, the flexibility of the lips, the great height of the internal tuberosity and of the length of the epicondyle of the humerus, the reverted distal ulnar rudiment, the posterior deviation of the coracoid process, the presence of a distinct lateral lobe to the cerebellum, the number of the upper incisors (being restricted to two), and the general shape of the wing are as in Molossi; while the complete tympanic bone (forming a ring at the upper margin), the pisiform bone being palmad and articulating with the fifth metacarpal bone, the palmad distinctness of the metacarpal bones, the shapes and relative proportions of the ectoturbinals, the presence of numerous vertical raised muscle-bands on the endopatagium, the angle of the lower jaw not being deflected, but remaining in axial line with that of the horizontal ramus, the genus resemble the true Phyllostomide.

Notes on Hibrew Phonetics. By J. Cheston Morris, A.M., M.D.

(Read before the American Philosophical Society, March 6, 1891.)

It might seem extremely rash for one whose acquaintance with Hebrew scarcely extends to a knowledge of its letters to offer any observations upon them in the presence of those who have made an exhaustive study of the subject; yet I do so, as thinking that one who occupies "the room of the unlearned," and is looking at the matter from a distance rather than from the dust-obscured atmosphere of the conflict of opinions, may offer some hints which may prove of value, even though they may not be wholly new.

In commencing the study of Hebrew characters, one is struck with two facts: 1. That there is said to be no character representing a pure vowel sound. This, I believe, is not the case with any other known alphabet. 2. That a change was made during the Babylonian captivity of the Jews, substituting the present square characters for the more ancient form. Let us inquire, first, why this was probably done. At this time the sacred records were subjected to inspection of their conquerors, containing, as they certainly did, many things which would be more or less offensive to them, and calculated to cast ridicule if not bring persecution upon the ex-